

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A surface acoustic wave sensor ~~(1)~~ comprising a sensor body having a central part and opposite smoothed edge zones outward of the central part; an antenna ~~(3)~~ for the body, a transducer ~~(4)~~ and reflectors ~~(5a and 5b)~~, ~~characterized in that~~ for converting electromagnetic waves at the antenna into mechanical waves which run along the sensor body; first reflectors on the sensor body and inward of the edge zones for together detecting changes in the spacing between the first reflectors due to change in the body; additional reflectors ~~(6a, 6b)~~ are arranged ~~in a~~ at one of the smoothed edge zone (8) on this surface acoustic wave sensor (1) ~~zones~~ in order to reflect signals which are used for evaluation of the current temperature.

2. (Currently Amended) The surface acoustic wave sensor as claimed in claim 1, ~~characterized in that~~ wherein the smoothed edge zone (8) on which the additional reflectors are disposed has a length outward of the central part that corresponds to approximately three times the thickness of the substrate material (9) of the sensor body.

3. (Currently Amended) The surface acoustic wave sensor as claimed in claim 1, ~~characterized in that this~~ further comprising an adhesive on a surface of the sensor body by which the sensor is mounted by means of an adhesive (2) on the a substrate material to be measured.

4. (Currently Amended) The surface acoustic wave sensor as claimed in claim ~~1~~, ~~characterized in that~~ 3, wherein the smoothed edge zone (8) is enlarged by means of the bonding has the surface (2) and areas but is an area without the adhesive (10).